Resource Citation

Author(s): <Dana Shum>

Description of Problem

The way that Resource Citation appears in UMM, MMT, and CMR needs to be improved.

Definition of 'Resource Citation': the text that someone using the collection data in research should use to cite the collection in professional scientific literature.

DAACs are using Citations according to different formats, and these are at the discretion of the DAAC manager. ESDIS provides guidance for Citations, and the MMT form needs to have some logic to enable these Citations to be formatted correctly. The addition of a Preview button could be added to the MMT form, which shows how the Citation would look, or the card for Citation needs to be revised. Title and Name are not required in the MMT form since these relate to the Collection by default, and logic needs to be introduced to make DOI and RelatedURL either-or.

See https://earthdata.nasa.gov/earth-observation-data/data-citations-acknowledgements for individual DAAC citation rules.

The UMM needs to be revised to ensure that any unnecessary fields have been removed. For each collection, the EDSC needs to display the citation, per NASA guidelines, and using the formats provided by each DAAC.

Issues:

1.Citation block in UMM-C currently contains individual fields which are used to construct the full citation string; some of these fields are redundant with other collection metadata fields (e.g. dataset title, dataset version, dataset DOI, dataset publisher)

2.DAACs may construct citation strings using individual DAAC choice of order, as long as NASA-required information is present

3.Client (like EDSC) needs an algorithm to construct the citation string from the building blocks; algorithm varies by DAAC

4. Configuration Management: DAACs are required to list citation text on the landing page for the collection; if the citation text is also maintained in the CMR, we need to decide which is the authoritative source, and we need a process to keep the values in synch.

JIRA Linkage

⚠️ *ECSE-87 - JIRA project doesn't exist or you don't have permission to view it.*

<Ctrl+Shift+J allows you to link to your ECSE JIRA ticket easily. Replace the ticket above with your ticket>

Current UMM-C Mappings to DIF, ECHO, ISO

See mapping between DIF9, DIF10, ECHO10 and UMM-C (suggested) below:

DIF9			DIF10			UMM-C		
Elements	Req	C	Elements	Req	C	Elements	Req	C
Data_Set_Citation	N	0..*	Dataset_Citation	N	0..*	Resource Citation	N	0..*
Data_Set_Citation/Dataset_Creator	N	0..1	Dataset_Citation/Dataset_Creator	N	0..1	ResourceCitation/Creators	N	0..1
Data_Set_Citation/Dataset_Editor	N	0..1	Dataset_Citation/Dataset_Editor	N	0..1	ResourceCitation/Editors	N	0..1
Data_Set_Citation/Dataset_Title	N	0..1	Dataset_Citation/Dataset_Title	N	0..1	ResourceCitation/Title	N	0..1
Data_Set_Citation/Dataset_Series_Name	N	0..1	Dataset_Citation/Dataset_Series_Name	N	0..1	ResourceCitation/SeriesName	N	0..1
Data_Set_Citation/Dataset_Release_Date	N	0..1	Dataset_Citation/Dataset_Release_Date	N	0..1	ResourceCitation/ReleaseDate	N	0..1
Data_Set_Citation/Dataset_Release_Place	N	0..1	Dataset_Citation/Dataset_Release_Place	N	0..1	ResourceCitation/ReleasePlace	N	0..1
Data_Set_Citation/Dataset_Publisher	N	0..1	Dataset_Citation/Dataset_Publisher	N	0..1	ResourceCitation/Publisher	N	0..1
Data_Set_Citation/Version	N	0..1	Dataset_Citation/Version	N	0..1	ResourceCitation/Version	N	0..1
Data_Set_Citation/Issue_Identification	N	0..1	Dataset_Citation/Issue_Identification	N	0..1	ResourceCitation/IssueIdentification	N	0..1
Data_Set_Citation/Data_Presentation_Form	N	0..1	Dataset_Citation/Data_Presentation_Form	N	0..1	ResourceCitation/DataPresentationForm	N	0..1
Data_Set_Citation/Other_Citation_Details	N	0..1	Dataset_Citation/Other_Citation_Details	N	0..1	ResourceCitation/OtherCitationDetails	N	0..1
Data_Set_Citation/Dataset_DOI	N	0..1	Dataset_Citation/Persistent_Identifier	N	0..1	ResourceCitation/DOI	N	0..1
			Dataset_Citation/Persistent_Identifier/Type (DOI or ARK)	Y	1	DOI only	N/A	N/A
						ResourceCitation/DOI/Authority	N	0..1
			Dataset_Citation/Persistent_Identifier/Identifier	Y	1	ResourceCitation/DOI/DOI	Y	1
						ResourceCitation/RelatedUrl	N	0..1
						ResourceCitation/RelatedUrl/ContentType ResourceCitation/RelatedUrl/Relation	N	0..1
						ResourceCitation/RelatedUrl/ContentType/Type	Y	1
						ResourceCitation/RelatedUrl/ContentType/Subtype	N	0..1
						ResourceCitation/RelatedUrl/Protocol	N	0..1
						ResourceCitation/RelatedUrl/Title	N	0..1
						ResourceCitation/RelatedUrl/Description	N	0..1
						ResourceCitation/RelatedUrl/Caption		0..1
Data_Set_Citation/Online_Resource	N	0..1	Dataset_Citation/Online_Resource	N	0..1	ResourceCitation/RelatedUrl/URL	Y	1..*
						ResourceCitation/RelatedUrl/MimeType		0..1
						ResourceCitation/RelatedUrl/FileSize		0..1
						ResourceCitation/RelatedUrl/FileSize/Size		1
						ResourceCitation/RelatedUrl/FileSize/Unit		1

Affected issues include: Issues which require the Citation relation to be better defined:

⚠ MMT-543 - JIRA project doesn't exist or you don't have permission to view it.

⚠ UMMC-392 - JIRA project doesn't exist or you don't have permission to view it.

⚠ UMMC-433 - JIRA project doesn't exist or you don't have permission to view it.

⚠ MMT-438 - JIRA project doesn't exist or you don't have permission to view it.

⚠ UMMC-344 - JIRA project doesn't exist or you don't have permission to view it.

Issues which related to Citation format on a DAAC-by-DAAC basis

⚠ UMMC-153 - JIRA project doesn't exist or you don't have permission to view it.

⚠ UMMC-193 - JIRA project doesn't exist or you don't have permission to view it.

⚠ UMMC-153 - JIRA project doesn't exist or you don't have permission to view it.

Issues pertaining to DOI or RelatedURL fields to be used

⚠ ECSE-76 - JIRA project doesn't exist or you don't have permission to view it.

Issues pertaining to UMM Citation improvements

⚠ UMMC-142 - JIRA project doesn't exist or you don't have permission to view it.

⚠ UMMC-145 - JIRA project doesn't exist or you don't have permission to view it.

Possible Solutions:

Option 1: Keep Citation Block as individual fields, but remove redundant fields

a. Remove DOI from Citation block

b. Remove Title and Version (redundant with Entry Title and Version)

c. Remove Publisher (redundant with Data Center Long Name, for Role = Distributor)

Changes to UMM-C fields

⚠ UMMC-344 - JIRA project doesn't exist or you don't have permission to view it.

⚠ ECSE-76 - JIRA project doesn't exist or you don't have permission to view it.

⚠ ECSE-65 - JIRA project doesn't exist or you don't have permission to view it.

ResourceCitation

Currently: Change to:

ResourceCitation	
ResourceCitation	
ResourceCitation/Creators	ResourceCitation/Creators
ResourceCitation/Editors	
ResourceCitation/Title	ResourceCitation/Title
ResourceCitation/SeriesName	ResourceCitation/SeriesName
ResourceCitation/ReleaseDate	ResourceCitation/ReleaseDate
ResourceCitation/ReleasePlace	ResourceCitation/ReleasePlace
ResourceCitation/Publisher	
ResourceCitation/Version	ResourceCitation/Version
ResourceCitation/IssueIdentification	
ResourceCitation/DataPresentation	

ResourceCitation/OtherCitationDetails	
ResourceCitation/DOI	ResourceCitation/DOI
ResourceCitation/DOI/Authority	ResourceCitation/DOI/Authority
ResourceCitation/DOI/DOI	ResourceCitation/DOI/DOI
ResourceCitation/RelatedURL	
	ResourceCitation/RelatedURL/URLContentType
	ResourceCitation/RelatedURL/Type
	ResourceCitation/RelatedURL/Subtype
ResourceCitation/RelatedURL/Protocol	
ResourceCitation/RelatedURL/Title	
ResourceCitation/RelatedURL/Description	ResourceCitation/RelatedURL/Description
ResourceCitation/RelatedURL/Caption	
ResourceCitation/RelatedURL/URL	ResourceCitation/RelatedURL/URL
ResourceCitation/RelatedURL/MimeType	
ResourceCitation/RelatedURL/FileSize	
ResourceCitation/RelatedURL/Size	
ResourceCitation/RelatedURL/Unit	

Changes to UMM-Common fields

⚠ ECSE-135 - JIRA project doesn't exist or you don't have permission to view it.

Option 2. Remove Citation block altogether from UMM-C (and just keep citation on the dataset landing page)

Option 3. List full citation text in single field, like ECHO, and keep in synch with landing page citation text

Interoperability Considerations

We have NASA guidelines on how to Cite and Acknowledge EOSDIS Data and Other Items.

Citing and Ackn...s−20130325.docx

Examples of data citations are given as:

1. Sankaran M., N. P. Hanan, and R. J. Scholes. 2007. Characteristics of African Savanna Biomes for Determining Woody Cover. Data set. Available on-line [http://www.daac.ornl.gov] from NASA EOSDIS Oak Ridge National Laboratory DAAC, Oak Ridge, Tennessee, U.S.A. doi:10.3334/ORNLDAAC/850, Accessed May 11, 2012.
2. Njoku, Eni. 2004, updated daily. *AMSR-E/Aqua L2B Surface Soil Moisture, Ancillary Parms, & QC EASE-Grids* V002, March to June 2004. NASA EOSDIS National Snow and Ice Data Center DAAC, Boulder, Colorado USA. http://dx.doi.org/10.7265/N5, Accessed July 18, 2013.
3. Oak Ridge National Laboratory Distributed Active Archive Center (ORNL DAAC). 2014. MODIS subsetted land products, Collection 5. Available on-line [http://daac.ornl.gov/MODIS/modis.html] from NASA EOSDIS ORNL DAAC, Oak Ridge, Tennessee, U.S.A. Accessed July 24, 2014. Subset obtained for MOD13Q1 product at 35.9587N,84.2874W, time period: 2000-02-18 to 2000-04-06, and subset size: 0.25 x 0.25 km.

Note that there are specific differences between the fields in the examples and the ISO CI_Citation class fields. For example, edition, editionDate, identifier, citedResponsibleParty, presentationForm, series, otherCitationDetails ISBN, ISSN, and graphic are not in the NASA recommended format. Other fields are present in the NASA recommended format, but not in the ISO CI_Citation class: doi or RelatedURL, and note CI_OnlineResource is not needed as a class, RelatedURL can suffice.

CI_Citation is shown in the Figure below.

Figure 1. ISO 19115-1 CI_Citation class representation.

Changes to CMR

⚠ CMR-2414 - JIRA project doesn't exist or you don't have permission to view it.

What should the MMT forms look like

⚠ MMT-543 - JIRA project doesn't exist or you don't have permission to view it.

⚠ MMT-438 - JIRA project doesn't exist or you don't have permission to view it.

⚠ MMT-384 - JIRA project doesn't exist or you don't have permission to view it.

⚠ MMT-421 - JIRA project doesn't exist or you don't have permission to view it.

⚠ MMT-437 - JIRA project doesn't exist or you don't have permission to view it.

How should the values in these fields be presented to the user on the EDSC

⚠ EDSC-441 - JIRA project doesn't exist or you don't have permission to view it.

The DAAC specific format for the ResourceCitation should appear on the EDSC in relation to the Collection.

Recommendation is to display the fully constructed Resource Citation for the collection when the user is retrieving collection data (i.e., on the Data Access page), with an introductory sentence explaining that if data from this collection is used in research, the collection must be cited in research papers as shown in the fully constructed Resource Citation.

NSIDC example :

Alley, R. and J. Fegyveresi. 2014. NSIDC Test Data Set, Version 1. [Indicate subset used]. Boulder, Colorado USA. NSIDC: National Snow and Ice Data Center. doi: http://dx.doi.org/10.7265/N5JW8BTJ. [Date Accessed].

ORNL example:

"Chini, L.P., G.C. Hurtt, and S. Frolking, 2014, Harmonized Global Land Use for Years 1500-2100, V1. Data Set. Available on-line http://daac.ornl.gov from Oak Ridge National Laboratory Distributed Active Archive Center, Oak Ridge, Tennessee, USA. http://dx.doi.org/10.3334/ORNLDAAC/1248"

How should pick lists / controlled vocabulary be handled?

Resource Citation Field	Current Source of Pick list values (MMT)	Proposed Source of Pick list values	Is this field used for EDSC Faceted Search?

Reconciliation of Existing Metadata values with new rules

tbd

Impact of Changes on Ingest of Granule Metadata

None

Error rendering macro 'pageapproval' : null